

WHAT IS CLAIMED IS:

1. A method of determining whether to indicate reception of an access code in a receiver operating in a communications system, comprising:
 - receiving a signal;
 - 5 generating a correlation value by correlating the received signal with a reference code;
 - setting a threshold level to a first value if the receiver is in a scan mode;
 - setting the threshold level to a second value if the receiver is in a traffic mode, wherein the second value corresponds to a lower degree of correlation than
 - 10 the first value;
 - comparing the correlation value with the threshold level; and
 - indicating reception of the access code only if the correlation value compares favorably with the threshold level.
- 15 2. The method of claim 1, wherein:
 - correlating the received signal with the reference code includes performing multiplication; and
 - the second value is lower than the first value.
- 20 3. The method of claim 1, wherein:
 - correlating the received signal with the reference code includes performing one or more Exclusive OR operations; and
 - the second value is higher than the first value.
- 25 4. The method of claim 1, wherein the correlation value compares favorably with the threshold level if the correlation value is greater than or equal to the threshold level.
5. The method of claim 1, wherein:
 - 30 generating a correlation value includes performing one or more Exclusive OR operations; and

the correlation value compares favorably with the threshold level if the correlation value is less than or equal to the threshold level.

5 6. The method of claim 1, wherein the access code identifies a channel used for communicating the signal.

7. The method of claim 6, wherein the access code is at least in part derived from a unique address associated with a transmitting unit.

10 8. The method of claim 6, wherein the access code is at least in part derived from a unique address associated with the receiver.

9. The method of claim 1, wherein:
the reference code is 64 symbols long;
15 the first value is 52; and
the second value is 48.

10. The method of claim 1, wherein the second value is dynamically determined as a function of a quality-of-service parameter.

20 11. The method of claim 10, wherein the quality-of-service parameter is a current packet error rate.

12. The method of claim 11, wherein the second value is dynamically determined to be a value that yields a false rejection rate that is substantially 10 times lower than the current packet error rate.

13. The method of claim 11, wherein the second value is dynamically determined by a function that maintains an inverse relationship between the second value and the current packet error rate.

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14. The method of claim 11, wherein the second value is dynamically determined by a function that maintains a proportional relationship between the second value and the current packet error rate.

5 15. The method of claim 10, wherein the quality-of-service parameter is a signal to noise ratio.

16. The method of claim 10, wherein the quality-of-service parameter is a carrier to interference ratio.

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17. The method of claim 1, wherein the second value is established by setting the second value equal to an initial value, and then repeatedly adjusting the second value until a quality-of-service parameter does not change anymore.

15 18. The method of claim 17, wherein the quality-of-service parameter is a current packet error rate.

19. The method of claim 17, wherein the quality-of-service parameter is a signal to noise ratio.

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20. The method of claim 17, wherein the quality-of-service parameter is a carrier to interference ratio.

21. The method of claim 1, wherein the second value is established by setting the second value equal to an initial value, and then repeatedly adjusting the second value until a quality-of-service parameter changes.

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22. The method of claim 1, wherein the first value enables the receiver to exhibit an acceptable false alarm rate during scan mode, and the second value enables a receiver to exhibit an acceptable false rejection rate during traffic mode.

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23. The method of claim 22, further comprising:
during traffic mode, preventing a false alarm from corrupting reception of a message by checking a remaining part of the received signal to detect the presence of errors; and

5 during traffic mode, aborting reception of the received signal if errors are detected.

24. An apparatus for determining whether to indicate reception of an access code in a receiver operating in a communications system, comprising:

10 logic that receives a signal;

logic that generates a correlation value by correlating the received signal with a reference code;

logic that sets a threshold level to a first value if the receiver is in a scan mode;

15 logic that sets the threshold level to a second value if the receiver is in a traffic mode, wherein the second value corresponds to a lower degree of correlation than the first value;

logic that compares the correlation value with the threshold level; and

20 logic that indicates reception of the access code only if the correlation value compares favorably with the threshold level.

25. The apparatus of claim 24, wherein:

correlating the received signal with the reference code includes performing multiplication; and

25 the second value is lower than the first value.

26. The apparatus of claim 24, wherein:

correlating the received signal with the reference code includes performing one or more Exclusive OR operations; and

30 the second value is higher than the first value.

27. The apparatus of claim 24, wherein the correlation value compares favorably with the threshold level if the correlation value is greater than or equal to the threshold level.

5 28. The apparatus of claim 24, wherein:
the logic that generates a correlation value includes logic that performs one or more Exclusive OR operations; and
the correlation value compares favorably with the threshold level if the correlation value is less than or equal to the threshold level.

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29. The apparatus of claim 24, wherein the access code identifies a channel used for communicating the signal.

15 30. The apparatus of claim 29, wherein the access code is at least in part derived from a unique address associated with a transmitting unit.

31. The apparatus of claim 29, wherein the access code is at least in part derived from a unique address associated with the receiver.

20 32. The apparatus of claim 24, wherein:
the reference code is 64 symbols long;
the first value is 52; and
the second value is 48.

25 33. The apparatus of claim 24, further comprising logic that dynamically determines the second value as a function of a quality-of-service parameter.

34. The apparatus of claim 33, wherein the quality-of-service parameter is a current packet error rate.

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35. The apparatus of claim 34, wherein the second value is dynamically determined to be a value that yields a false rejection rate that is substantially 10 times lower than the current packet error rate.

5 36. The apparatus of claim 34, wherein the second value is dynamically determined by a function that maintains an inverse relationship between the second value and the current packet error rate.

10 37. The apparatus of claim 34, wherein the second value is dynamically determined by a function that maintains a proportional relationship between the second value and the current packet error rate.

15 38. The apparatus of claim 33, wherein the quality-of-service parameter is a signal to noise ratio.

39. The apparatus of claim 33, wherein the quality-of-service parameter is a carrier to interference ratio.

20 40. The apparatus of claim 24, wherein the second value is established by setting the second value equal to an initial value, and then repeatedly adjusting the second value until a quality-of-service parameter does not change anymore.

25 41. The apparatus of claim 40, wherein the quality-of-service parameter is a current packet error rate.

42. The apparatus of claim 40, wherein the quality-of-service parameter is a signal to noise ratio.

30 43. The apparatus of claim 40, wherein the quality-of-service parameter is a carrier to interference ratio.

44. The apparatus of claim 24, wherein the second value is established by setting the second value equal to an initial value, and then repeatedly adjusting the second value until a quality-of-service parameter changes.

5 45. The apparatus of claim 24, wherein the first value enables the receiver to exhibit an acceptable false alarm rate during scan mode, and the second value enables a receiver to exhibit an acceptable false rejection rate during traffic mode.

46. The apparatus of claim 45, further comprising:
10 logic that prevents a false alarm from corrupting reception of a message during traffic mode by checking a remaining part of the received signal to detect the presence of errors; and
logic that aborts reception of the received signal during traffic mode if errors are detected.

15 47. A machine readable storage medium having stored thereon one or more instructions for causing a processor to determine whether to indicate reception of an access code in a receiver operating in a communications system, wherein the one or more instructions cause the processor to perform:

20 receiving a signal;
generating a correlation value by correlating the received signal with a reference code;
setting a threshold level to a first value if the receiver is in a scan mode;
setting the threshold level to a second value if the receiver is in a traffic
25 mode, wherein the second value corresponds to a lower degree of correlation than the first value;
comparing the correlation value with the threshold level; and
indicating reception of the access code only if the correlation value compares favorably with the threshold level.